

## Exhibit 7

**Laura Francis Hays, on behalf of herself and all others similarly situated,**

**v.**

**Nissan North America, Inc., and Nissan Motor Company, LTD.**

**Investigation and Failure Analysis: Vehicle Floor Pan Corrosion  
Nissan L31 Altima (MY 2002-2006) and A34 Maxima (MY 2004-2008)**

**Report prepared by:  
Anand David Kasbekar, Ph.D.  
VSI File No. 1699  
October 12, 2018**

**Report prepared for:  
Stueve Siegel Hanson LLP  
460 Nichols Rd., Suite 200  
Kansas, City MO 64112**

## **Materials Reviewed**

Reviewed materials include the following:

1. Vehicle Floor Pans and/or Photographs:
  - a. 1996 Nissan Altima - 1N4BU31D0TC156354
  - b. 1997 Nissan Altima - 1N4BU31D1VC159623
  - c. 1998 Nissan Altima - 1N4DL01D4WC252907
  - d. 2000 Nissan Altima - 1N4DL01A4YC123588
  - e. 2002 Nissan Altima – 1N4AL11D52C240557
  - f. 2003 Nissan Altima – 1N4AL11D93C274082
  - g. 2008 Nissan Altima – 1N4AL24E58C113343
  - h. 2009 Nissan Altima – 1N4AL2AP2AN410053
  - i. 2001 Honda Accord - 1HGCG56601A016097
  - j. 2001 Ford Focus - 1FAFP34P21W282984
  - k. 2002 VW Golf 4dr right side - 9BWGB61J624035937
  - l. 2003 Saturn L200 - 1G8JU54F53Y554834
  - m. 2003 Toyota Corolla - 1NXBR32E73Z089499
  - n. 2004 Dodge Stratus - 1B3EL56R04N219597
  - o. 2005 Hyundai Sonata - KMHWF25H05
  - p. 2007 Mazda6 - 1YVHP80C375M52636
  - q. 1992 Ford/Kia Festiva – KNJPT05HXN6124668
  - r. 1996 Buick Lesabre – 1G4HP52KXVH400520
  - s. 2001 Nissan Maxima – JN1CA31D41T829184
2. First Amended Complaint
3. Provided Documents from Nissan First Document Production

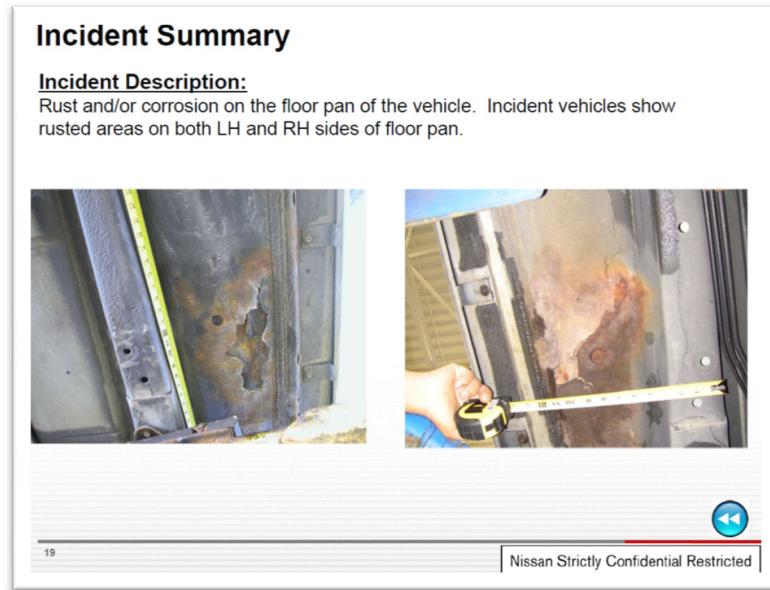
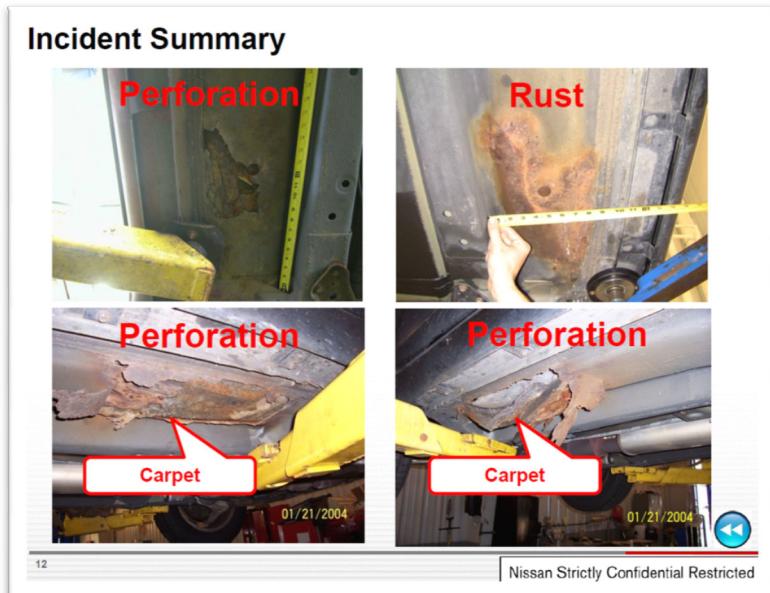
4. Brochures for 2002-2006 Nissan Altimas
5. Owner's Manuals for 2002-2006 Nissan Altimas
6. NA-PRO 2011-01767
7. NA-PRO-2015-01947
8. Technical Service Bulletins
9. Warranty Information Booklets for 2002-2006 Nissan Altimas
10. Provided Documents from NNA Production
11. Protective Order
12. MARIA DEMARIA, et al., Memorandum Opinion and Order
13. NISSAN BULLETIN 2002-06 Altima & 2004-08 Maxima Floor Pan Repair Kit Reference:  
NPSB/15-352 Date: July 6, 2015
14. Steven Miller Deposition and Deposition Exhibits
15. SAE J447 Prevention of Corrosion of Motor Vehicle Body and Chassis Components

## **Analysis and Opinions**

Corrosion prevention of automobile chassis and body components is an essential design criterion. It is foreseeable that these components will be subject to road spray, salt or other corrosive environmental conditions that must be accounted for by vehicle manufacturers such as Nissan. The undercarriage of automobiles is known to be subjected to road spray and therefore is a critical area that needs to be adequately protected from corrosion.

The affected class vehicles consist of Nissan Altima automobiles for model years 2002-2006 (6/2001 – 4/2007 production date range), and Nissan Maxima automobiles for model years 2004-2008 (12/2002-5/2008 production date range) as per NNA003582. Inspection of floor pans from class vehicles, review of documents including inspection photographs of class vehicles provided by Nissan, and review of customer complaints and vehicle photographs available on the Internet as well as in the provided NHTSA documents confirm that the class vehicles exhibit severe corrosion that is unique to the driver and front passenger floor board areas. The construction of the floor pan incorporates a metal reinforcing structural member with a through hole that is directly attached to the floor pan with an aligned through hole. To the best of my knowledge, this dual metal layer floor pan structural design with aligned through holes is unique to

the class vehicles and relies upon a single flexible butyl patch to cover both the hole in the structural member as well as the concentric hole in the floor pan. Additionally, the corrosion mechanism is unique and atypical in that it initiates from the vehicle interior and results in perforation that can cause large holes through the vehicle floor pan. The corrosion of the floor pan area occurs in vehicles that are otherwise free of any significant corrosion.



**Figure 1: Underside of vehicles inspected by Nissan showing “rust/or corrosion on the floor pan of the vehicle” and perforation which was present on both the left and right sides of the floor pan [see Steve Miller Deposition Exhibit 21 NNA002988]. Note the exposed carpeting due to the large holes in the floor pan.**

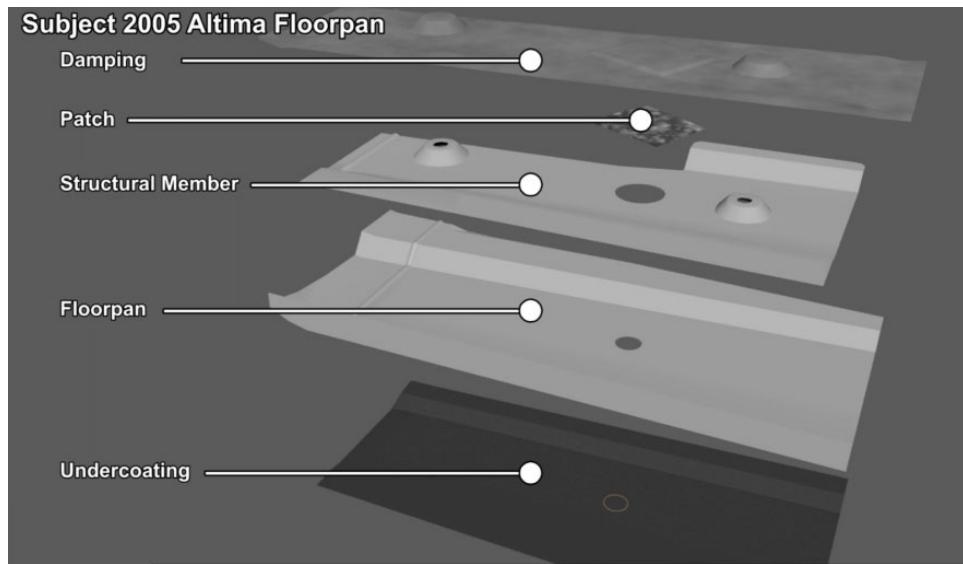


**Figure 2:** Passenger side floor pan of inspected Nissan Altima manufactured in June of 2004 after partial removal of upper reinforcing structural member. The arrows indicate the previously discussed concentric holes. The upper arrow shows the butyl patch that was placed on the top surface of the reinforcing member. This corrosion is not visible from inside the vehicle until removal carpet/damping layers and removal of the reinforcing member.

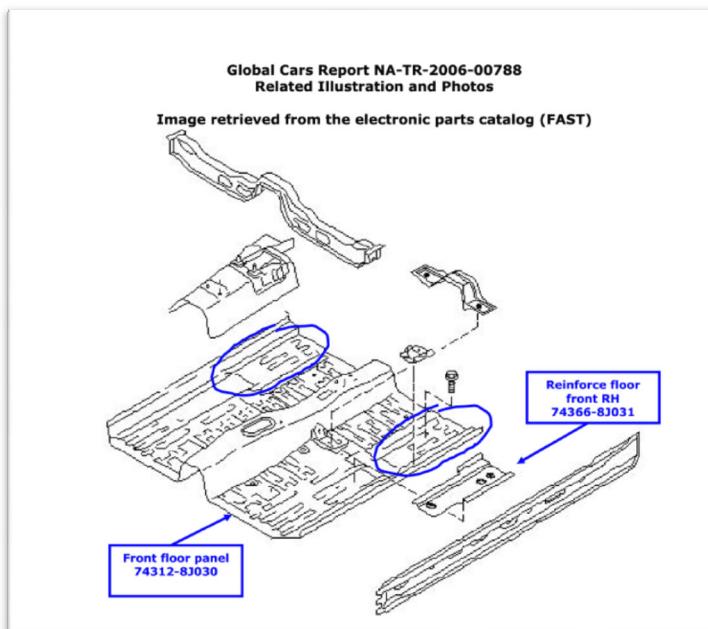


**Figure 3:** Driver side floor pan of inspected Nissan Altima manufactured in March of 2005. Note the large through hole adjacent to the fuel door release latch.

The design and fabrication of the floorboard area is substantially similar for all of the class vehicles in that the affected model year floor pans consist of multiple layers which include a dampening layer immediately under the carpeted area in the driver and passenger foot wells; a butyl patch below the damping layer that is attached to a metal structural member; a floor pan layer beneath the member layer; and a layer of undercoating at the bottom.



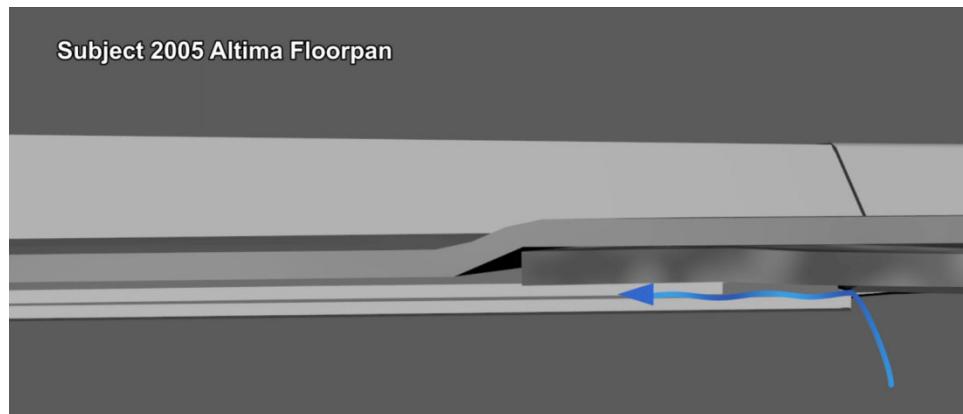
**Figure 4:** Exploded view of floor pan construction based on examination of floor pan structure of a 2005 Nissan Altima vehicle.



**Figure 5:** Front floor panel (aka floor pan) and structural reinforcing member for right front floorboard of passenger compartment [NNA001595].

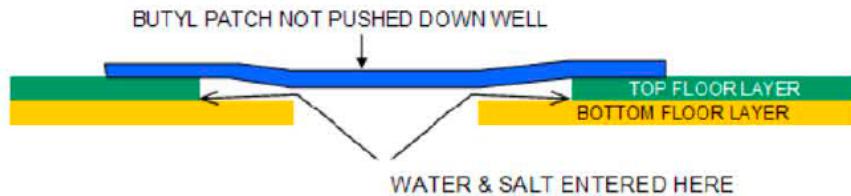
Inspection and analysis of the floor pan design revealed that moisture was likely entering the vehicle compartment due to an inadequate and defective seal design where the butyl patch seal is intended to cover two concentric holes of the stacked dual layer configuration of the floor pan and reinforcing structural member. Consistent with my independent findings, Nissan's own analysis that was recently provided indicates the root cause of the floor pan corrosion is in fact due to inadequate sealing of the inner side of the floor pan assembly [page 18 of Steve Miller Deposition Exhibit 21 T 114-NNA002988].

This defective seal allows water to enter from the vehicle undercarriage and migrate into the space between the floor pan and the attached reinforcing member. The geometry of the floor pans would allow moisture to accumulate and remain in the affected area. Since the area in question is covered by the reinforcing member and damping material, moisture intrusion is unlikely to be detected by the vehicle operator or passengers until well after the corrosion has damaged the floor pan and structural member. Similarly, the underside of the floor pan has a layer of undercoating to protect from external corrosion. In this particular situation the undercoating masks the corrosion until the floor pan structure is so degraded that either the internal corrosion becomes visible through the undercoating on the bottom of the floor pan, or after it has completely penetrated the floor pan (see previous Figures 1-3).



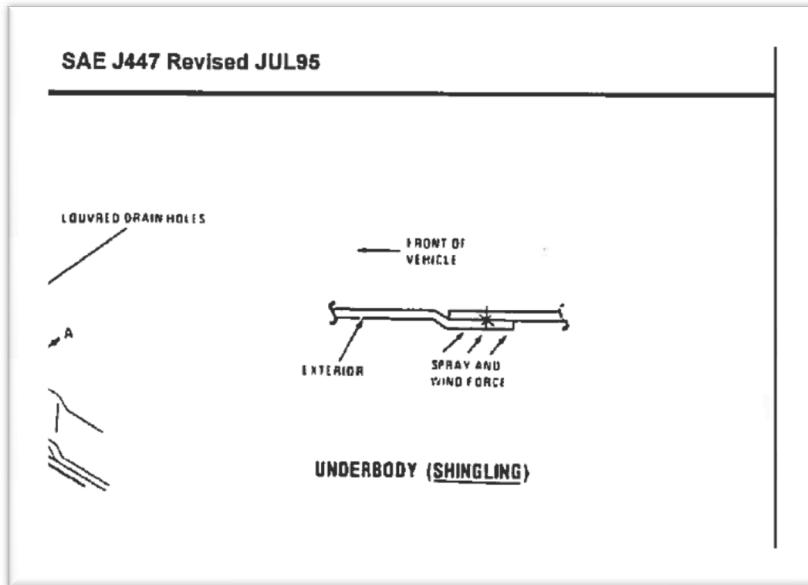
**Figure 6: Diagram showing Kasbekar analysis of water migration through insufficient seal.**

## ROOT CAUSE OF FLOOR RUST



**Figure 7:** Diagram showing Nissan analysis of water migration through insufficient seal [see NNA001613].

The circular opening that the flexible butyl patch is expected to seal presents the rearward portion of its circumferential edge to road spray in a manner in which the overlap is not consistent with a common lapping or shingling design feature that is intended to prevent water intrusion (See Figure 8).

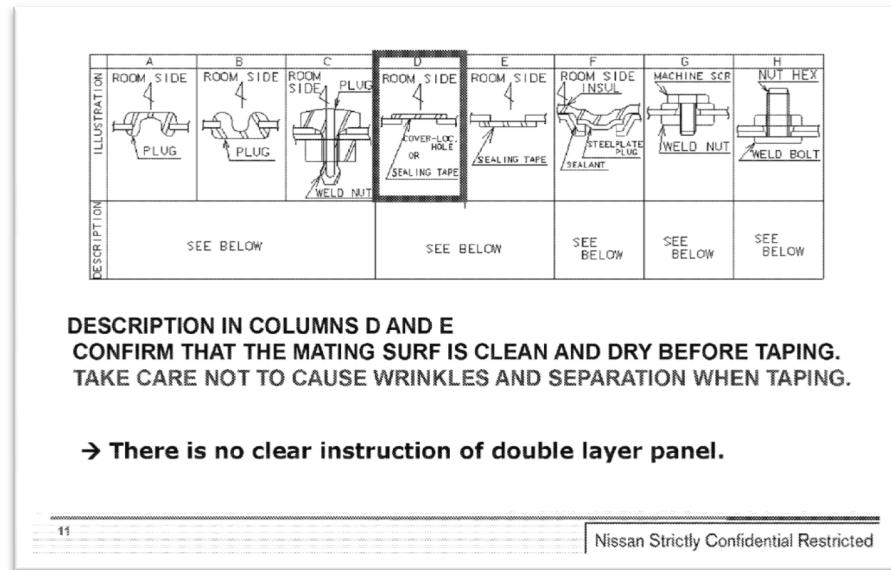


**Figure 8:** Image from SAE J447 Prevention of Corrosion of Motor Vehicle Body and Chassis Components showing desirable lapping of underbody structure to prevent water intrusion.

The affected areas of the floor pans and the pattern of corrosion which consistently emanates from patched hole in the floor pan are the same within the proposed class of Nissan vehicles. The corrosion process is localized in the same specific areas of the front passenger and driver floor pans and involves the area

beneath and including the metal structural members that are attached to the floor pans. The defect is latent and hidden from Nissan consumers until the corrosion becomes so severe that it adversely affects the structural integrity of the floor pan. In order for the damage to be detected, corrosion which initiates from within the vehicle compartment, must migrate downward through the floor pan and become visible through the vehicle undercoating. In some cases, if sufficient moisture penetrates the occupant compartment such that it saturates the interior carpeting then the driver or passenger may have cause for concern and bring the vehicle to a service center. Nissan's own investigation of this matter shows that the severe corrosion of the floor pans in the class vehicles is occurring despite a notable absence of corrosion on other parts of the vehicle.

While it is foreseeable that moisture can enter the floor pan area from different sources, it is the moisture intrusion mechanism in a specific area that is unique to the subject class of vehicles. It is this mechanism which is causing the corrosion pattern that is consistent among the class vehicles and is a direct consequence of the design of this particular area of the floor pan. This corrosion originates from an approximately one inch diameter hole in the floor pan which is inadequately sealed by a flexible butyl patch that is not directly applied to the hole in the floor pan itself, but to a second hole in an upper reinforcing member such that the butyl patch must span two components and two holes. This design is not only unique to the class vehicles, but this specific dual layer structure and butyl patch application design was not reasonably accounted for by Nissan. Based on the documents reviewed to date, to the best of my knowledge, Nissan did not previously use a butyl patch in a dual layer floor pan configuration. The absence of reasonable design documents pertaining to the installation of a butyl patch for a double layer configuration suggests that the butyl patch was not intended for such use.



**Figure 9: Nissan document revealing that there is no clear instruction of double layer panel and in fact no design diagram showing the type of patch that is used in the class vehicle being applied to a double layer panel [NNA00359].**

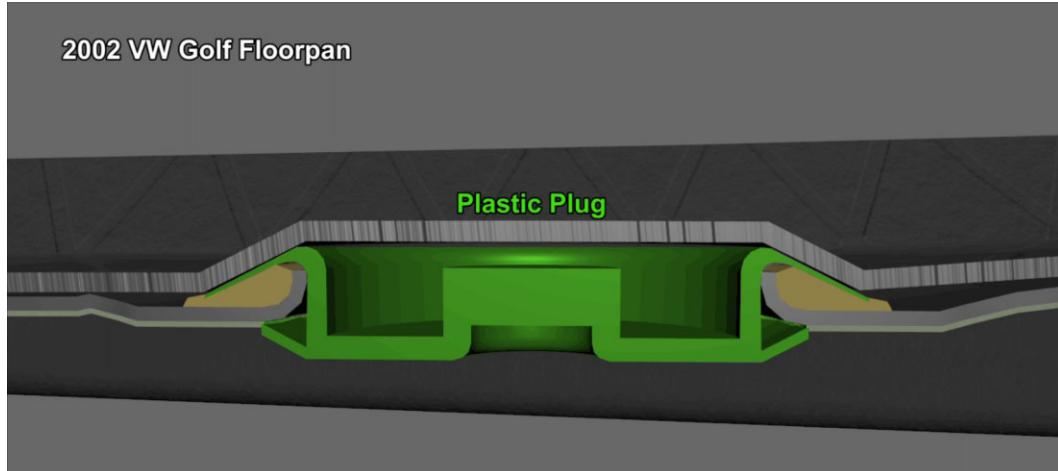
In contrast to the ineffective butyl patch application that Nissan used to attempt to seal the subject dual layer structural reinforcing member/floor pan design, Nissan and other manufacturers typically use more robust polymer plugs or other more positive seals to prevent moisture intrusion as shown in the chart from NNA00359 (see Figure 9) as well as the following figures. These sealing technologies were technologically feasible and in use prior to the manufacture of the subject class vehicles.



**Figure 10: 2016 Photograph of plastic plug seal in 2003 Toyota Corolla floor pan. Note absence of corrosion or evidence of moisture intrusion.**



**Figure 11:** 2016 photograph of plastic plug seal from of 2002 Volkswagen Golf floor pan. Note absence of any corrosion or evidence of moisture intrusion.



**Figure 12:** Computer generated cross-section of 2002 Volkswagen Golf floor pan showing plastic plug seal configuration.



**Figure 13:** 2016 photograph of plastic plug seal from newer 2009 Nissan Altima floor pan. Note absence of any corrosion or evidence of moisture intrusion in contrast to Altimas from subject vehicle class.



**Figure 14:** Close-up photograph of plastic plug seal shown in Figure 13. Note absence of any corrosion or evidence of moisture intrusion in contrast to Altimas from subject vehicle class.

As previously discussed, the subject class vehicles utilized an adhesive butyl patch that is not attached directly to the floor pan, but instead around a second upper hole in the attached structural member. The butyl patch seal design which lacks adequate contact to insure proper adhesion, can also be affected by residual forces and external forces that will tend to pull the patch upward and away from the hole it is attempting to seal. At this time, I am unaware of any procedures or test data that shows the butyl patch utilized by Nissan could effectively maintain a reliable watertight seal. Similarly, the design documentation produced to date does not incorporate any reasonable procedures, instructions, or standard methods used by Nissan to apply the butyl patch.

In the class vehicles undercoating is applied to the bottom of both the rigid metal floor pan as well as to the exposed butyl patch. Since the flexible butyl patch that covers the hole in the floor pan lacks a rigid backing that is equivalent in stiffness to the floor pan, the integrity of the bonding of the undercoating to this flexible surface is not equivalent to that of the undercoating applied to the other rigid metal surfaces of the underside of the vehicle. Flexure or movement of the butyl patch relative to the more rigid floor pan would have an adverse affect on the adhesive seal around the edge of the hole and the integrity of the undercoating around the edge of the hole.

While Nissan appears to deny that the defective floorboards present safety issues, there are several areas that are not adequately addressed in the provided documents that are at a minimum safety concerns. The severe nature of the corrosion and perforation in areas at or adjacent to the driver's feet can adversely affect the structural integrity of the floor board and the condition of the surrounding carpet and floor mat near the area of operator foot pedals. Although Nissan indicates that a CAD analysis implies that the vehicle crashworthiness is not affected, there is an absence of documents to show the results of any quantitative analyses or physical testing to support this conclusion. Additionally, there is no analysis that I am aware of regarding the diminished integrity of the occupant compartment with regard to preventing exhaust fumes or road debris from entering through the degraded floorboard area. In the event of a vehicle fire the degraded or missing floorboard beneath the driver's and/or passenger's feet could readily allow flames and toxic fumes to more rapidly enter the occupant compartment. This condition could be especially dangerous if any of the

occupants are trapped or incapacitated as it would reduce the time available for first responders to free the occupants. A more complete analysis may reveal additional potential safety concerns related to the degraded condition of the floor pan structure as a result of the severe corrosion problem in the affected vehicles.

The above findings and opinions are based upon my investigation and the provided information to date. Should additional discovery documents become available or if further work is warranted these findings and opinion may be updated accordingly.

### **Qualifications**

I hold a B.S.E., M.S. and Ph.D. in Mechanical Engineering and Materials Science with a minor in Computer Science. I have over 30 years of experience as a forensic engineer having worked in the areas of failure analysis, materials science, product liability, accident reconstruction, computer aided engineering, modeling, simulation, and visualization. A current copy of my curriculum vitae is attached as Appendix A. A list of my prior testimony is attached as Appendix B.

### **Compensation**

VSI currently charges \$385 per hour for my time plus expenses for all work other than deposition and trial related time which is billed at \$435 per hour.



Anand David Kasbekar, Ph.D.

10/12/2018  
Date

**Appendix A**  
Kasbekar Curriculum Vitae  
**Anand David Kasbekar, Ph.D.**

**Education**

B.S.E. Mechanical Engineering, Duke University 1985  
M.S. Mechanical Engineering and Material Science, Duke University 1987  
Ph.D. Mechanical Engineering and Material Science with a  
Minor in Computer Science, Duke University 1994

**Qualifications**

Dr. Kasbekar's area of expertise is in the field of Mechanical Engineering and Materials Science with an emphasis on accident investigation, failure analysis, safe product design, computer simulation and 3D-visualization. His graduate research concentrated on the development of a nondestructive materials characterization technique which can be used to analyze defects in both metals and polymers at sub-microscopic levels. Dr. Kasbekar's research was funded by the Army Research Office. As part of this research, Dr. Kasbekar implemented a computer controlled system for thermal control and automated data collection. He has also conducted research involving low angle X-ray diffraction, thermal analysis, and mechanical testing to evaluate both metallic and polymeric components.

As a consultant with Research Engineers, Inc. (REI) since 1987, Dr. Kasbekar has worked in the areas of forensic engineering, materials characterization, product liability, and failure analysis. Currently, Dr. Kasbekar serves as President of Visual Sciences, Inc. (VSI) and has over 30 years of experience in the application of computer simulation and scientific visualization to the field of forensic engineering. This experience includes 3-dimensional computer modeling, photogrammetry, computer-aided accident reconstruction, computer imaging, finite element analysis and simulation of dynamic systems. Dr. Kasbekar has applied his computer expertise to the areas of accident reconstruction, failure analysis, safe product design, and human factors studies.

In addition to his work with VSI and REI, Dr. Kasbekar has served as an Adjunct Assistant Professor in the Department of Mechanical Engineering and Materials Science at The Duke University School of Engineering since 1995. He has also served on the executive committee and as President of the Duke University Engineering Alumni Council. He has served on the governing board for the Society of Automotive Engineers as the Vice-Chair of Math & Science for the North Carolina Section. Dr. Kasbekar has been the Principal Investigator and Research Scientist for multiple research and development contracts that have been awarded to Visual Sciences, Inc. by the United States Department of Defense.

## **Relevant Experience and Post Graduate Training**

- Failure Analysis of Metals and Plastics
- Finite Element Modeling and Analysis
- Accident Reconstruction
- Photogrammetry
- Defect and Failure Analysis of Automotive Components
- Machine Guarding and Safe Product Design
- Materials Characterization and Testing
- Computer Simulation and Animation
- Perceptual Discrepancies in Color Production
- State-of-the-Art Data Visualization
- Physically Based Modeling
- Particle System Modeling
- Computer Graphics in Visual Effects
- Procedural Modeling and Rendering Techniques
- Recent Techniques in Human Modeling, Animation and Rendering
- Anthropometry and Laser Scanning of Humans
- UNIX, IRIX, VMS, DOS, Windows, and Macintosh Operating Systems
- The Effect of Impact and Other Rapid Loading Mechanisms on Plastics
- Polymer Degradation, Stabilization, and Failure Analysis
- Plastic Component Failure Analysis
- Failure Analysis of Plastic and Rubber Materials
- Environmental Stress Cracking and Other Solvent Effects
- Properties and Failure Mechanisms of Polycarbonate
- Preventing Plastic-Product Failures
- Advance Polymer Testing DEA
- Polymer Analysis from Raw Material to Formulation
- 3D Metrology in QA and Reverse Engineering
- 3D Laser Scanning for Boatbuilding

## **Professional Experience**

*Principal:* Visual Sciences, Inc., Raleigh, NC (1995-Present): Directs all aspects of the Computer Visualization Laboratory. Specializing in the application of computer visualization and simulation to solve problems in the fields of science and engineering.

*Consultant:* Research Engineers, Inc., Raleigh, NC (1987-Present): Works as a forensic engineer in the areas of accident reconstruction, failure analysis, safe product design, and human factors studies. Developed and directed the Computer Visualization Laboratory for Research Engineers.

*Assistant Adjunct Professor:* Duke University School of Engineering, Department of Mechanical Engineering and Materials Science, Durham, NC (1995): Responsibilities included research, teaching, laboratory work, application of computer simulation and visualization technology to failure analysis case studies.

*Contract Research Consultant:* Battelle Memorial Institute, Columbus, OH (1993): Developed computer simulation model to analyze dynamic failure modes of proprietary thermal cut-off devices for electrical components.

*System Administrator:* Department of Mechanical Engineering and Materials Science, Duke University (1986-1987): Hardware and software management for DEC MicroVax II, Macintosh and DOS based computers; systems integration; and development of data acquisition and analysis programs.

*Engineer:* MPR Associates, Washington, D.C. (1986): Developed course in metallurgy and failure analysis for engineers; conducted failure analysis and defect analysis of metallic components primarily for naval and power generation equipment.

*Research and Teaching Assistant:* Department of Mechanical Engineering and Materials Science, Duke University (1984-1986). Conducted research in the area of materials science, failure analysis, and polymer characterization; laboratory instructor and teaching assistant for Failure Analysis and Materials Science classes.

*Engineering Assistant:* Federal Emergency Management Testing Facility, Naval Yard, Washington, D.C. (1983). Designed, prototyped, fabricated and tested equipment to manufacture and evaluate cumulative radiation dosimeters.

*Supervisor:* Department of Transportation, Duke University (1982-1986). Responsibilities included driver training, supervision, and scheduling of transportation personnel; basic fleet maintenance and repair scheduling.

## **Professional Societies**

American Society of Mechanical Engineers  
ASM The Materials Information Society  
American Society of Safety Engineers  
Society of Automotive Engineers  
Association for Computing Machinery  
Society of Plastics Engineers  
National Society of Professional Engineers (Past Member)  
National Computer Graphics Association (Past Member)  
The Metallurgy Society (Past Member)  
National Safety Council (Past Member)

## **Honors**

Dean's List 4 years  
Class Honors 4 years  
Pi Tau Sigma International Mechanical Engineering Honor Society  
Tau Beta Pi Engineering Honor Society  
Graduated Magna Cum Laude  
Graduated with Departmental Distinction  
Research and Teaching Award for Graduate Study  
Awarded Plastics Institute of America Fellowship

## **Major Research Awards, Seminars, and Publications**

“Modeling Integrated Helmets for Aviation”, Research Contract, US Department of Defense, 2003.

“Pressure Sensing Headforms”, Research Contract, US Department of Defense, 2000.

“A Dynamic Model for Design Optimization of Protective Masks”, Research Contract, US Department of Defense, 1997.

"High Technology and Construction: Tools for the Millennium  
Forensic Applications of Three-Dimensional Computer Simulation &  
Visualization." North Carolina Bar Association, Durham, NC 1998 (Invited  
Speaker).

"The Use of Computer Simulation and Visualization as a Forensic Engineering  
Tool", The Americans Inns of Court, Duke University School of Law, Durham, NC  
1996 (Invited Speaker).

"The Application of 3-dimensional Computer Simulation & Visualization to the  
Fields of Accident Reconstruction and Forensic Engineering." Tennessee  
Defense Lawyers Association, Nashville, TN, 1995 (Invited Speaker).

"Seeing is Believing: Winning Your Case Through the Use of Computer  
Simulation." Stark County Academy of Trial Lawyers Fall Seminar, Akron, OH,  
1994 (Invited Speaker).

"Computer Simulation and Visualization as an Engineering Tool." Joint Meeting  
of the North Carolina Chapter of the Society of Automotive Engineers and  
American Society of Mechanical Engineers, Raleigh, NC, 1994 (Invited Speaker).

"Fundamentals of 3D Computer Animation." Alliance Training Consortium,  
Raleigh, NC, 1993 (Instructor).

"State-of-the-Art in Accident Reconstruction and Computer Aided  
Simulation/Animation." West Virginia Trial Lawyers Mid-Winter Seminar,  
Charleston, WV, 1991 (Invited Speaker).

"Computer Simulation and Visualization." Panel on Multimedia, MacWorld  
Exposition, Boston, MA, 1989 (Invited Speaker).

Kasbekar, A.D. "A Positron Annihilation Lifetime Study of The Effects of  
Molecular Weight On Thermal Response and Free Volume Relaxation in  
Polystyrene." M.S. Thesis, Duke University Department of Mechanical  
Engineering and Materials Science, Durham, NC, 1987.

Kasbekar, A.D., P.J. Jones, and A. Crowson. "Positron Annihilation Lifetime  
Evaluation of Thermal Cycling Effects in Atactic Polystyrene." Journal of Polymer  
Science: Part A: Polymer Chemistry, 27 (1989): 1373-1382.

Kasbekar, A.D., P.J. Jones, and A. Crowson. "A Positron Annihilation Lifetime  
Study of Thermal Response and Isothermal Relaxation in Atactic Polystyrene."  
8th International Conference On Positron Annihilation. Ed. L. Dorikens-Vanpraet,  
M. Dorikens and D. Segers. Gent Belgium: World Scientific, 1988.

Kasbekar, A.D. "A Positron Annihilation Lifetime Study of Crosslinked  
Polystyrenes and Sequential Polystyrene/Polystyrene Interpenetrating Polymer  
Networks." Ph.D. Dissertation, Duke University Department of Mechanical  
Engineering and Materials Science, Durham, NC, 1994.

**Appendix B**  
**Testimony of**  
**Anand David Kasbekar, Ph.D.**

January 13, 2014	Fairlawn Enterprises, LLC v IES Commercial Inc. a Newcomb Electric	Commonwealth of Virginia In the Circuit Court of the City of Roanoke
February 6, 2014	Bruce v CAV International, et al	In the Circuit Court of Cook County, Illinois
February 11, 2014	Linda Taylor, Phillip Taylor and Elizabeth Van Pelt Vs Sportsman's Outfitters & Marine, Inc.	In the Circuit Court of Macon County State of Missouri
February 18, 2014	Daniel Dobson, et al. vs Renee Wade, et a.	In the Circuit Court of the 19 <sup>th</sup> Judicial Circuit, in and for St. Lucie County, Florida
March 11, 2014	Townsend v NCDOT	North Carolina Industrial Commission
May 15, 2014	Dorman vs Atmos Energy	In the Circuit Court of the City of Richmond
July 29, 2014	Miller vs Richard Allen Gaddy, Blue Max Trucking, et al	State of North Carolina County of Mecklenberg
August 21, 2014	Bruno Vono vs Paul H. Angier and John K. Wolfe	In the Circuit Court of the Seventeenth Judicial Circuit in and for Broward County, FL
August 29, 2014	Dorman vs Atmos Energy	In the Circuit Court of the City of Richmond
September 9, 2014	Townsend v NCDOT	North Carolina Industrial Commission
September 12, 2014	Townsend v NCDOT	North Carolina Industrial Commission
September 25, 2014	Vollman Nicholaus vs Middlesex Corporation	In the Circuit Court of the Ninth Judicial Circuit, in and for Orange County, FL
October 24, 2014	Bruno Vono vs Paul H. Angier	In the Circuit Court of the Seventeenth Judicial Circuit in and for Broward County, FL

	and John K. Wolfe	
October 29, 2014	Bruno Vono vs Paul H. Angier and John K. Wolfe	In the Circuit Court of the Seventeenth Judicial Circuit in and for Broward County, FL
May 20, 2015	Lois Huffman et al. vs City of Marion, OH	In the Court of Common Pleas of Marion County, OH
June 9, 2015	Debra Jane Pipps, et al vs Robert O'Neal McCants, et al.	State of South Carolina Court of Common Pleas County of Horry Fifteenth Judicial Circuit
June 15, 2015	Micron Technology v Safway Services, Inc. and Robert Aquino	Virginia - In the Circuit Court for the City of Alexandria
August 7, 2015	Kawasaki Motors Manufacturing, et al. vs ITW Fastex-CVA, et al.	In the Circuit Court of Jackson County, Missouri at Independence
August 21, 2015	The Estate of Peter Paul Faust, et al. vs Strata Corporation, et al.	In the United States District Court for the District of Montana Billings Division
November 17, 2015	Hickerson vs Yamaha Motor Corp., et al.	United States District Court District of South Carolina Anderson Division
February 2, 2016	Quentin Ravizza vs PACCAR, Inc & Kenworth Turck, Co.	In the United States District Court Northern District of Illinois Eastern Division
February 5, 2016	Tracy Sanborn and Louis Lucrezia vs Nissan North America, Inc.	United States District Court Southern District of Florida
February 25, 2016	Lesley Marbeth Derrick, deceased vs. Berlin G. Myers	In the Court of Common Pleas for the State of South Carolina Dorchester County

	Lumber Corp., and Daniel Patrick Siebert	
March 3, 2016	H.J. Heinz Company vs. Atlantic Aviation FBO Holdings, LLC and Mercury Air Center – Nashville, LLC  Global Aerospace, Inc., vs. Atlantic Aviation FBO Holdings, LLC and Mercury Air Center – Nashville, LLC	In the Circuit Court for Davidson, Tennessee at Nashville
May 3, 2016	Carolyn Thomson and Aaron Hoylk vs. Spokane County, a municipal corp, Spokane County Sheriff's Dept., and Joseph Bodman	In the Superior Court of the State of Washington in and for the County of Spokane
April 26, 2017	Melinda S. Spratt, Plaintiff vs. TREK Bicycle Corporation, Defendant	In the Superior Court of Cobb County State of Georgia
May 17, 2017	Barlow vs The Cook Group, Galleon Resort at Key West	In the Circuit Court of the Eleventh Judicial Circuit in and for Miami-Dade County, Florida
June 6, 2017	Quentin Ravizza vs PACCAR, Inc & Kenworth Truck, Co.	In the United States District Court Northern District of Illinois Eastern Division
June 19, 2017	Quentin Ravizza vs PACCAR, Inc & Kenworth Truck, Co.	In the United States District Court Northern District of Illinois Eastern Division

August 29, 2017	Billy Jo Humphries v. JLG Industries, Inc.	In the United States District Court For The Eastern District of Virginia
November 20, 2017	Whynot vs Publix	In the Circuit Court of the Ninth Judicial Circuit in and for Orange County, Florida Division 35
January 25, 2018	Tribble vs Warwood Tool Company	In the United States District Court for the Western District of Virginia Lynchburg Division
April 27, 2018	Rider vs Kawasaki Motors, Corp	In the United States District Court District of Utah, Central Division
July 31, 2018	Bennie Wood and Linda Wood vs Navistar, et al.	In the Circuit Court of Cook County, Illinois County Department, Law Division